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ABSTRACT

This monograph brings together a series of research studies that relate to participative decisionmaking in complex formal organizations. Its design includes an examination of general statements and positions on and a review of selected studies related to participative decisionmaking. Initially, the reviewer analyzes the participation question as an element in the "individual vs organization" dichotomy, following which various statements by writers on participation are scrutinized. The author shows that the terms employed by these writers fit a polarity of organization description that can be labeled "mechanistic vs organic." A discussion of this polarity ensues, emphasizing (1) the value orientations involved and (2) the facts derived from research findings. (Author)

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PARTICIPATIVE DECISION MAKING:

An Analysis and Review

by

G. Dale Meyer

Monograph Series No. 15 September, 1970

Center for Labor and Management

College of Business Administration

The University of Iowa, Iowa City, Iowa

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FOREWORD

This monograph brings together a series of research studies which relate to the topic of participative decision making in complex formal organizations.

The author, Professor G. Dale Meyer of the Graduate School of Business Administration, University of Colorado, has analyzed the participation literature using an "individual versus organization" frame of reference. The studies reviewed emphasize the research which bears on the efficiency and effectiveness of participative decision making in organizations.

The Center for Labor and Management is pleased to publish Professor Meyer's work. Also, my colleagues and I wish to thank those foundations and organizations whose continued interest and financial support have made this publication possible.

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CHAPTER I

RATIONALE FOR THE REVIEW

The study of organizational decision making has been approached from many directions. Contributions to this literature have emanated from the disciplines of mathematics, statistics, economics, sociology, psychology, political science, and organization theory. Although quantitative aspects of decision processes are clearly important in complex formal organizations, these aspects are not reviewed in this monograph. Rather, the controlling purpose is to analyze a sampling of the behavioral-oriented decision-making literature.

Much of the behavioral research on organizational decision making has been precipitated by a fundamental question: What happens to organizational effectiveness and efficiency(1) when hierarchical subordinates become active participants in the decision-making processes?

The design of this monograph includes: (1.) an examination of general statements and positions on participative decision making; and (2.) a review of selected studies related to participative decision making. These studies are classified and reviewed as: (a) small-group studies, (b) organization observation studies, and (c) organization experiments.

Initially, the reviewer analyzes the participation question as an element in the "individual versus organization" dichotomy. Then various statements by writers on participation are scrutinized. The author shows that the terms employed by these writers fit a polarity of organization description which can be labeled "mechanistic versus organic." A discussion of this polarity ensues, emphasizing: (1.) the value orientations involved, and (2.) the facts derived from research findings.

CHAPTER II

THE INDIVIDUAL VERSUS THE ORGANIZATION

Warren Bennis proffers three quotations, widely spaced in time, to emphasize the fundamental nature of the "individual versus organization" question.(2) First, Bennis uncovers a statement by Rousseau (1762) in which the issue is posited as a question of associativity:

> The problem is to find a form of association which will defend and protect, with the whole common force, the person and good of each associate, and in which each, while uniting himself with all, may still obey himself alone, and remain as free as before. This is the fundamental problem.(3)

In a similar vein, Chris Argyris (1957) predicated an individual versus organization dualism:

> How is it possible to create an organization in which the individuals may obtain optimum expression and, simultaneously, in which the organization itself may obtain optimum satisfaction of its demands.(4)

And Douglas McGregor (1960) expressed concern about human growth in an organizational setting:

> We have not learned enough about the utilization of talent, about the creation of an organizational climate conducive to human growth. The blunt fact is that we are a long way from realizing the potential represented by the human resources we now recruit into industry.(5)

Each of these writers expresses an interest in the adaptation of the individual in the organization to the end that both agents maximize their potentials. This antipodal controversy pervades the literature on participative decision making.

One reads of participation versus authoritarianism,(6,7) autocracy versus democracy,(8,9) and of organic versus mechanistic(10) organizations. The terms are distinct, but the themes are kindred. A closer exploration of selected quotes will reveal that diverse terms are expended to depict the fundamental "individual versus organization" polemic.

Stephen Sales, for instance, differentiates between "authoritarian" and "democratic" supervision:

> . . . authoritarian supervision, in general, is characterized by the relatively high degree of power wielded by the supervision over the work group. As

> contrasted with democratic supervision, both power and decision-making functions are absolutely concentrated in the person of the authoritarian. Democratic supervision, on the other hand, is characterized by a sharing of power and by participative decision-making. Under democratic supervision, the work group becomes in some ways co-equal with the supervisor; responsibility is spread rather than concentrated.(11)

Clearly, Sales' "concentration of power" distinctions represent the same bifurcated classes as does the "individual versus organization" dyad. Sales' terms do indeed fit other taxonomic definitions of the participation controversy (as we have described it).

The poles of the noted dyad are labeled "authoritarian" and "participative" by Likert and associates.(12) More recently Likert attempted to distinguish his definitions, and to characterize the continuum from System 1 (authoritarian) to System 4 (participative).(13) Although the labels are modified, the individual-versus organization question persists.

Likert, however, cannot uniquely claim the term "participation." (Perhaps this is his reason for creating Systems 1 through 4?) Lowin's excellent review of the "participative decision making" literature exposes the breadth of the participation debate. Lowin himself offers a useful synoptic definition of terms:

> By participative decision making we mean a mode of organizational operations in which decisions as to activities are arrived at by the very persons who are to execute those decisions. Participative decision making is contrasted with the conventional hierarchical mode of operations in which decision and action functions are segregated in the authority structure.(14)

Lowin's definition provides a "handle" by which one can easily conceptualize–and perhaps measure–the degree of participation in an organization. "Participation" as employed in this study will reflect Lowin's meaning.

Argyris has been one of the primary interpreters of the individual versus organization proposition. *Integrating the Individual and the Organization* is an amply referenced compendium on the argument, combined with:

> . . . theorizing about how organizations might be redesigned to take into account–more fully than has been possible up to this date–the energies and competencies that human beings have to offer.(15)

Argyris' resumé of major characteristics which identify "mechanistic" and "organic" organizations merits extensive quotation:

> Although some slight variations exist, the work of other scholars also emphasizes these two categories (mechanistic v. organic). For example 'authoritarian' is used by Likert, 'habit' by Bennis, 'closed system' by Barnes, 'bureaucratic' by Litwak, and 'Theory X' by McGregor. Summarizing the major points emphasized by all these scholars, we conclude that the

mechanistic organization is characterized by (1.) decision making and control at the top levels of the organization, (2.) an emphasis on unilateral management action, based on dependency and passive conformity, (3.) the specialization of tasks so that the concern for the whole is broken down, (4.) the centralization of information, rewards and penalties, (5.) the management being responsible for developing and maintaining the loyalty, commitment, and responsibility for all participants on as high a level as possible, and (6.) an emphasis on social status, intergroup and individual competition and rivalry. Such an organization assumes that people inherently tend to dislike work, be irresponsible, prefer to be directed, desire a rational world where emotions are suppressed, and 'fair' management means appropriate financial rewards and penalties.(16)

The counterpart to the "mechanistic" organization is the "organic" organization, again depicted by Argyris:

> The organic organization is variously called 'participative' group (Likert), 'problem solving' (Bennis), 'open system' (Barnes), 'human relations' (Litwak) and 'Theory Y' (McGregor). The organic organization is characterized by (1.) decision making widely done throughout the organization, (2.) an emphasis on mutual dependence and cooperation based on trust, confidence and high technical or professional competence, (3.) a constant pressure to enlarge tasks and interrelate them so that the concern for the whole is emphasized, (4.) the decentralization of responsibility for and use of information, rewards and penalties, membership, (5.) participants at all levels being responsible, committed, productive, and desire a world in which the rationality of feelings and interpersonal relationships is as valued as cognitive rationality.(17)

The "organic" organization, as detailed by the various students on the subject, is allegedly productive of higher-order need-fulfillent. Argyris' opinion is representative of this view when he avers that "all research cited (in Argyris' review) suggests that self-expression and self-actualization can best be achieved in the organic organization."(18)

Much of what has been said regarding (1) the recurring theme of the individual versus the organization, as phrased in (2) differentiable but closely related terms appears in the taxonomical matrix of Table 1. It is obvious, even in this incomplete and sketchy listing, that a mixed group of writers have used a variety of terms, over a long period of time, to converge on a common theme regarding the ideal organization structure. One should be reminded that these dyads of themes—organization versus individual, mechanistic versus organic, authoritarian versus participative, autocratic versus democratic—whatever the phrasing, reiterate the historic encounters of ideologies in the political domain. Clearly, the debate dwells in society at large. Observe that Chief Justice Warren E. Burger summarizes the Court's duty in terms of this indefatigable issue:

> In short, we tried to establish order while protecting liberty. It is from this we derive the description of the American system as one of ordered liberty. To maintain this ordered liberty we must maintain a reasonable balance between the *collective need* and the *individual right,* and this requires periodic examination of the balancing process, as an engineer checks the pressure gauges on his boilers. (19)

It is quite understandable, therefore, that American organizational life is involved in the "periodic examination of the balancing process." But before we examine the details of those specific issues it would seem logical to look at the debate in its value perspective.

CHAPTER III

QUESTIONS OF VALUE

There are countless essays which retrace the evolution of management thought from the "bureaucratic-scientific management" syndrome, through the "human relations" orientation, and on to the "behavior-reality centered" revisions.(20) It is beyond the scope of this monograph to recapitulate these efforts.

Table 1
Selected Terminologies Describing the Polar Extremes
of Mechanistic Versus Organic Organization Models

Author	*Mechanistic Term(s)*	*Organic Term(s)*
Likert[a]	Exploitive authoritative System 1	Participative group System 4
Argyris[b]	Traditional pyramidal left-end of "mix-model" continuum	Reality centered right-end of "mix-model" continuum
Barnard[c]	Effectiveness	Efficiency
Barnes[d]	Closed system	Open system
Bennis[e]	Habit-autocratic	Problem-solving democratic
Blake-Mouton[f]	Concern for production	Concern for people
Leavitt[g]	Structural and technical solutions	People solutions
Litwak[h]	Bureaucratic	Human Relations
McGregor[i]	Theory X	Theory Y
Blau[j]	Totalitarian bureaucratic	Democratic
Burns-Stalker[k]	Mechanical	Organic
Shepard[l]	Mechanistic	Organic
Lowin[m]	HIER	PDM
Bovard[n]	Leader-centered	Group-centered

[a]Rensis Likert, *New Patterns in Management* (New York: McGraw-Hill, 1961).
[a]Rensis Likert, *The Human Organization* (New York: McGraw-Hill, 1967).
[b]Chris Argyris, *Integrating the Individual and the Organization* (New York: John Wiley and Sons, 1964).
[c]Chester I. Barnard, *The Functions of the Executive* (Cambridge: Harvard University Press, 1938).
[d]Louis B. Barnes, *Organizational Systems and Engineering Groups* (Cambridge: Graduate School of Business, Harvard University, 1960).
[e]Warren G. Bennis, *Changing Organizations* (New York: McGraw-Hill, 1966).
[f]Robert R. Blake and Jane S. Mouton, *The Managerial Grid* (Houston: Gulf Publishing, 1964).
[g]Harold J. Leavitt, *Managerial Psychology* (Chicago: University of Chicago Press, 1958).

However, the underlying assumptions of the present study might be better understood if one examines selected parts of the debate on participative decision making in terms of their value orientations.

The ideological content of the participation question is seldom very subtle. The "tyranny of words"(21) is clutched in the value domains of diehard disputants who debate on "property rights" versus "human rights." The debaters' concerns relate to questions of economic efficiency juxtaposed to human fulfillment. And, of course, there are those who hold a mediating position, recognizing that both facts and values are contained in the debate. Evidence for the preceding few remarks can be secured by examining the value-oriented words of advocates on both sides of the participation issue.

The writer does not lament the fact that value orientations permeate the participation literature. Rather, it is suggested that responsible analysis requires that the value orientations of "schools" of thought be clearly stated. Moral premises play an organizing role in social science research inasmuch as they direct the researcher toward investigating one set of relationships rather than another. Kerr and Fisher provide a comprehensive review of the values which inhere in the "economic" (scientific management) based theories versus those residing with the "plant sociologists" (human relationists a la Elton Mayo). Kerr has placed the matter of value assumptions in context by asserting that:

> No research in the social sciences can be free of value assumptions, and the claim that is sometimes made that the social sciences must eschew values if they are ever to rise above the level of ethical exhortation is always naive. It is seldom a difficult task to discover the implicit values held in a theoretical system. Even when an antipathy to value premises is carried to the lengths of denying theory any exploratory role, the problems selected by the empiricist as worth worrying about carry a core value judgment within them. Even if this were not demonstrable there would remain, as ultimate and

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[h]Eugene Litwak, "Models of Bureaucracy Which Permit Conflict," *American Journal of Sociology*, LXVII (September, 1961), pp. 177-184.

[i]Douglas McGregor, *The Human Side of Enterprise* (New York: McGraw-Hill, 1960).

[j]Peter M. Blau, *Bureaucracy in Modern Society* (New York: Random House, 1956).

[k]Tom Burns and G. M. Stalker, *The Management of Innovation* (London: Tavistock Publications, 1961).

[l]Herbert A. Shepard, "Changing Interpersonal and Intergroup Relationships in Organizations," *Handbook of Organizations*, ed. James G. March (Chicago: Rand-McNally, 1965), Ch. 26.

[m]Aaron Lowin, "Participative Decision Making: A Model, Literature Critique, and Prescription for Research," *Organizational Behavior and Human Performance*, III (February, 1968), pp. 68-106.

[n]E. W. Boyard, Jr., "Group Structure and Perception," *Journal of Abnormal and Social Psychology*, XLVI (1951), pp. 398-405.

> unprovable, the faith in the value of empirical research itself, variously called science or truth by empiricists.
>
> It is not, therefore, a meaningful charge that Mayo and his associates (human relationists) are moralists. So are economists. What is more disturbing to economist and plant sociologists alike is the effort to disguise these moral judgments as truths objectively deduced from observation or research and the prescriptions which follow as the inevitable consequences of neutral sets of facts. (22)

It is the writer's purpose here to "reveal" some of the "disguises" to which Kerr and Fisher refer. Both the economists and the human relationists prescribe essentially authoritarian solutions to work problems. The "revisionists," on the other hand, seemingly attempt to consider the pertinent facts of a situation before offering suggestions. Economists insist upon efficiency and rationality of production above all else, while the Mayo-oriented human relationists stress social order and stability as delivered through an enlightened (human relations-oriented) managerial elite. Kerr and Fisher have succinctly described the divergent value assumptions of these two "schools":

> The chosen world of the plant sociologists (human relationists) is peopled by non-rational workers who desire security under the leadership of skilled plant managers. The workers have a strong sense of group interest, welcome control, and feel loyalty toward their leaders.
>
> The liberal economists have an almost opposite view of heaven on earth. Man is a reasoning being and is primarily motivated by a desire to maximize his individual welfare. Competitive markets are used to spur on managers to greater efficiency. Reliance is primarily placed on regulated self-interest, and freedom of choice as consumers, workers, and voters is considered essential. (23)

The writer now proposes to take a hard look at some of the incisive questions raised by these underlying questions of value.

The Spectrum of Positions

With just a little probing one can usually index the value orientations of students of organization behavior. Bennis examined the ideas of several writers in an effort to isolate the basic tenets of various hypotheses on participation. Bennis classified the scientific management-bureaucracy approach in these words:

> In the classical theory, then, the conflict between the man and the organization was neatly settled in favor of the organization. The only road to efficiency and productivity was to surrender man's needs to the service of the bloodless machine. (24)

On the other hand, the human-relationists' propensities and assumptions were set out as an almost opposite phenomenon:

> This model assumes that there is no essential conflict between individual satisfaction and organizational satisfaction, that the former (whether described as 'morale', 'job satisfaction', or whatever) will lead to greater efficiency, and that authority, insofar as it exists, attempts to facilitate forces which will increase personal satisfaction. (25)

Finally, Bennis underscores a group of revisionists, interposed between the scientific management and human relations orientations:

> In general, the revisionists recognize clearly that organizational theory must take into account such factors as purpose and goal, status and power differentials, and hierarchy . . . Now the revisionists are concerned with external economic factors—with productivity, formal status, and so on—but not to the exclusion of human elements that the traditional theorists neglected. (26)

The "revisionist," then, is an intercessor between the traditional and human ideologies. He attempts to weigh the values at each of these poles, and to consider the unique variables of a given situation.

To recapitulate, the writer contends that subtle questions of value underprop each of the schools of thought in the individual-organization controversy. To examine these values, one needs to clarify the rhetoric which so often befogs the issues. Statements by several selected antagonists are now appraised in an effort to identify value orientations of the several individual-organization theses.

Scientific Management-Bureaucratic Orientations

One of the most interesting recent debunkers of participative decision making is William Gomberg. Gomberg denounces democratic management (or employee participation in decision making) as "unworkable and unrealistic."(27) In castigating the participation proponents Gomberg discloses his criteria for measuring organization performance:

> Naturally a democratic society does not have autonomous business institutions free to impose their economic objectives upon the public without any countervailing constraints, but it is important to remember that our corporate heads are assigned the task of *economic performance, not emotional rehabilitation.* (28) (Italics mine.)

Clearly, Gomberg's values reveal an emphasis on productive efficiency and little direct concern with human factors per se. Furthermore, Gomberg is convinced that most experimentation with "worker participation" has been experienced by workers as "manipulation."(29) But Gomberg is quite unworried about the "modish philosophy shared by the avant garde," because:

> The computer which multiplies the control area of the central office is leading to recentralization of control without any *nonsense* about participative decision making at the grass roots.(30) (Italics mine.)

One need not read beyond the first few paragraphs of Gomberg's article to ascertain his value orientation. In the Bennis schema, Gomberg reveals an affinity for the scientific management-bureaucratic school. Other writers on the current scene similarly disparage "participation" as unrealistic.

Charles Perrow's message on the subject is clear, but not quite so flagrant as is Gomberg's. Perrow couches his comments in a "current state of the art" hedge while appealing to "realism":

> . . . complex organizations are necessarily authoritarian and bureaucratic to some degree and attempts to implement a permissive 'democratic' ideology do not appear to be realistic, at least with the present technological knowledge.(31)

Perrow is even more careful to define his misgivings when he addresses himself to hospital organization studies. He points out that:

> Studies in general hospitals have been less inclined to call for sweeping changes in structure and process but for the 'human relations fallacy'—attempting to solve all organization problems by improving human relations—is . . . evident . . .(32)

Perrow has placed his emphasis on the technological and structural stimuli in organization behavior. Although he does believe that human considerations are important, Perrow relegates these matters to a secondary importance as dependent variables.

Abraham Zaleznik, in criticizing Likert's hypotheses, bares his own value system, and dismisses "democratic management" as utopian. The really important activities which engage management are the:

> . . . decisions which are designed to control the effect of external conditions such as foreign competition, business cycles and the like. The long-run results in organizations seem more nearly an outcome of how well strategy anticipates and solves environmental conditions . . . Common to many of the utopian theories of group dynamics and human relations schools of thought, Likert's heroes are the unsung middle managers who try to be democratic and follow his System 4 ideal.(33)

Zaleznik can't be faulted for emphasizing the importance of "strategic" decisions. For that matter, it is not the writer's purpose to fault, but rather to point out that Zaleznik's value system relegates human factors, and therefore participation, to a dependent status.

Just as Perrow emphasizes technology, and Zaleznik accentuates strategies, Chapple and Sayles concentrate their analysis on the structures of or-

ganizations. In so many words, "To obtain lasting change one does not try to change people, but rather to change organizational constraints which operate on them."(34) In other words, rather than soliciting participation, one removes constraints, whatever their nature, thereby facilitating economic efficiency. In the Chapple and Sayles exposition, these constraints are principally variables of the process of organization–the structural components. Sayles was guided by this structural emphasis when he edited a book of readings in answer to the charges of Argyris, Boulding, et al., that big business (or large-scale organizations) stifle individualism.(35) The readings carry the message that hierarchical structure is not essentially alien to individualistic development.

As a concluding entry on this spotty ledger of writers with a nonparticipation bent, it is interesting to note that Maslow has entered the debate, taking what some might consider to be an unlikely position. Maslow's thesis is that we must be heedful of the "very superior boss." In voicing this concern Maslow *is* cognizant of the ideological theme of the democracy debate, and he disparages the "human relationists":

> With dogma occupying this front-rank position, it is not surprising that human relations theory has evaded the problem of the very superior boss. The participative kind of management, where subordinates work together toward a good solution to a problem, is often an inappropriate setting for the superior boss.(36)

Maslow counsels that the superior boss must be recognized in spite of the democracy issue:

> Those managers who do function best as highly directive leaders . . . must not be dogmatically rejected as antidemocratic.(37)

In fairness to Maslow's position, it should be emphasized that his perspective is at variance with the rigid economic efficiency paradigm offered by Gomberg. Maslow's thesis correlates with the revisionist (or "reality-centered")(38) position. Nevertheless, Maslow provides a rationale for the antiparticipation position: authoritarian leadership can be rationalized when one finds *obviously* "superior" bosses!

This selected sample of "tradition-oriented" statements represents the left end of the authoritarian-participation continuum. Clearly, the values attending these statements relate to the attitudes of the scientific management-bureaucratic school of thought.

The Democratic Emphasis

The antiparticipationists hold no monopoly on forceful value-oriented appeals. Proponents of "democracy" or "participation" in organizations often emphasize the fundamental importance of the human being. For instance,

the value system based on the worth of the individual is vented in Lewin's wartime plea for more research on democratic leadership:

> Democracy–people are fighting for it, people are dying for it. It is the most precious possession we have . . . If science is going to help establish the reality of democracy for the young American it cannot be a science dealing with words. It will have to be a science dealing with facts close to the everyday life of the individual person; with facts that matter . . .(39)

Lewin obviously valued democracy as a social ideal, and he sought empirical "facts" to prove that democratic methods were both of high value *and* efficient.

Bennis, more recently, promulgates a similar theme, i.e., that democratic organizations are the *most* efficient systems, and therefore "democracy (in organizations) is inevitable."(40) Note that Bennis couches his values in a plea for democracy as the "most effective means" of survival:

> Our position is, in brief, that democracy (whether capitalistic or socialistic is not at issue here) is the only system which can successfully cope with the changing demands of contemporary civilization. We are not *necessarily* endorsing democracy as such; one might reasonably argue that industrial civilization is pernicious and should be abolished. We suggest merely that given a desire to survive in this civilization democracy is the most effective means to achieve this end.(41)

In essence, Bennis trumpets democracy as our *only* effective *means* for *survival*. It follows, then, that organizations "can successfully cope with the changing demands of contemporary civilization" only by employing democratic processes. The opposition impugns Bennis' uncompounded contention, arguing that democratic efficiencies must yet be proved. In other words, Bennis has tendered his values as facts with the attendant emotion of an ideologist (of the Mannheim description). Gomberg attacks Bennis' position as a proverbial doctrine in need of facts:

> Its (democracy) superior efficiency remains to be demonstrated. Bennis has given us no data.(42)

Paradoxically, Bennis petitions that one should examine his attitudes towards democracy:

> . . . attitudes toward democracy are located in the complex texture of personality and culture. Somehow or another, we must transcend what Mannheim referred to as our 'perspectivistic orientations' and see with a new innocence, devoid of cant and parochialism . . . we are all spectators and participants in a great ideological debate pivoting around the issue of how best to organize human effort.(43)

There is little doubt, however, that Bennis' "perspectivistic orientation" is liberally treated with participative values. He emphasizes communication,

consensus, justifiable influence, emotional expression, and invokes a "basically human bias."(44) The only delineated situation in which Bennis could condone an "autocratic centralized structure" is where tasks are "simple" and conditions are "static."(45)

Earlier references have been made to Burns and Stalker(46), Shepherd(47), Blake and Mouton(48), and others(49) whose statements could be further elaborated to represent the par participation emphasis. One could note countless writers who have placed their primary emphasis on participation and organization democracy. It is the contention of this writer, nonetheless, that the selected statements we have analyzed adequately portray the participation position and its attendant value system.

The Revisionist Hedge

Modern organization theorists are inclined toward a more moderate conclusion on the value and effect of participation. It was previously mentioned that Argyris and McGregor can both be classed with this "moderate" group. Argyris coined the phrase "reality centered leadership." McGregor emphasized "management by integration and self-control" wherein the "Theory Y" manager would selectively adapt his strategies.(50) McGregor described his own shift from a laissez faire "human relations" approach to an "adaptive" position. Mark his farewell statement upon leaving the Antioch College presidency:

> I believed, for example, that a leader could operate successfully as a kind of advisor to his organization. I thought I could avoid being a 'boss' . . . I thought that maybe I could operate so that everyone would like me—that 'good human relations' would eliminate all discord and disagreement.
> I couldn't have been more wrong. It took a couple of years, but I finally began to realize that a leader cannot avoid the exercise of authority any more than he can avoid responsibility for what happens to his organization.(51)

McGregor's "new" position influenced a wide contingent of writers. One often encounters his thesis that participation must be examined relative to (1.) the tasks at hand, and (2.) personalities of managers and workers.

As an example, consider Wilensky's list of conditions under which authoritarianism might be expected to work efficiently:

1. clearly defined and simple goals
2. clearcut division of labor
3. necessary skills are well-known and possessed by a large group
4. strong pressures from outside the group itself toward conformity—threat of unemployment, danger to survival (e.g., war, pending bankruptcy, etc.)
5. group members see speedy action as necessary (e.g., urgent task in crisis situation)

6. previous group experience (in family, cliques, work groups, formal associations, etc.)—sometimes called "the personality factor"—has accustomed the group members to authoritarian leadership.(52)

The writer observes that each of these factors involves, in one way or another, tasks and/or personalities.

On a similar—but perhaps less situationally oriented—basis, Robert McMurry has argued for "benevolent autocracy."(53) McMurry, interestingly, strikes a concordant note with McGregor's Antioch comment. Ideologically, McMurry favors patricipative or "bottoms-up" management. Practically, however, he sees little hope that many of the hard-driving people who maintain management positions will be willing to delegate much autonomy below the top echelons of management."(54) McMurry theorizes that the logical compromise between his value *ideal* and the nitty-gritty *reality* is benevolence by the "great man" brand of autocrat. Unfortunately, McMurry seems to neglect the questions of subordinate motives and adaptations to his variety of paternalism. In this sense McMurry represents a curious recapitulation of the "human relations" emphasis.

Personality factors (as they relate to autocratic leadership) have been considered by a disparate set of writers.(55) If one were forced to draw conclusions from available evidence, one might venture that certain personalities find little difficulty in adapting to the authoritarian structure, whereas others are frustrated by such structures. Pearlin describes the former group in terms of "status obeisance":

> . . . status obeisance minimizes the alienation that otherwise results from being told what to do with little or no opportunity for reciprocal influence. The highly obeisant are more likely to react to such an authority style with the feeling that it is rightful and proper rather than with feelings of deprivation.(56)

Pearlin's analysis is particularly pertinent for analyzing certain groups of workers. For instance, there is some debate on whether nurses are essentially "obeisant," as Pearlin phrases it, or whether a new militancy has developed.(57) Indeed, personality characteristics might play a varying role in the authoritarianism-participation debate depending upon the general class of worker being studied.

This casual review of the "reality-centered" or "revisionist" authors fails to do full justice to all of the contributors. The writer, in agreement with Bennis, cannot neglect to praise the revisionist orientation, "for realizing that leadership is the fulcrum on which the demands of the individual and the demands of the organization are balanced."(58) More simplistic views of leadership, such as those expressed in the classical and human relations schools, failed to unravel the complicated milieu of administrative matters. In sum, the writer concurs with McGregor's analysis that leadership is a

relationship involving: (1.) characteristics of the organization–purpose, structure, nature of tasks performed, and (2.) social, economic, political milieu.(59) Accordingly, the researcher has attempted to build a representative series of such characteristics into this review of the literature.

In sum, the heated debate on participation has obviously been fed by questions concerning values. Just as certainly, however, questions of fact have fanned the coals of contention. It seems appropriate, therefore, to examine selected empirical work bearing on the participation question.

CHAPTER IV

QUESTIONS OF FACT

A convenient scheme of review will be adopted to facilitate the analysis of studies relating to participation. Selected studies will be classified as (a) small-group experiments, (b) organization observation studies, and (c) organization experiments. Although this classification is tenuous, and the writer is cautious concerning its long-run value, it is measured to serve our limited interests.

Affective-Economic Variable Relationships

Throughout the succeeding review of empicial research, the writer will attempt to analyze *both* the economic *and* the affective results of studies on participative decision making. The relationships between affective and economic variables have long been a subject for organization research. The writer will not elaborate on this assertion, except to cite a portion of the rigorous model construction work of March and Simon to exemplify an affective-economic emphasis:

> Suppose a production employee is dissatisfied. We would predict that he would search for alternatives of action. What are the alternatives open to him: A rather large number of alternatives are likely to be evoked in such a situation, and a theory of motivation should specify the conditions under which these various alternatives are evoked. For simplicity, let us focus attention on just three key alternatives:
>
> First, the employee can leave the organization . . .
>
> Second, the employee can conform to the production norms of the organization . . .
>
> Third, the employee can seek opportunities for satisfaction without high production. (60)

Clearly, March and Simon were guided by a conviction that affective and economic variables are highly interrelated.

Much discussion has centered on the nature of satisfaction (or morale)-productivity relationships. Brayfield and Crockett,(61) Vroom,(62) and also Herzberg, Mausner, Peterson, and Capwell(63) (among others) have covered this ground quite adequately. Although these researchers find weak positive relationships between satisfaction and productivity, they find much stronger relationships between satisfaction and other adaptive be-

havior (turnover, absenteeism, and other affective reactions). Many studies including recent research by Hulin and by Graen and Hulin support such satisfaction-adaptation findings.(64)

Small-Group Experiments

Lecture versus discussion. During the early 1940s and continuing into the 1950s, the participation question entered into a series of studies comparing the merits of lectures versus discussions. The early work was undertaken under the auspices of the National Research Council's Committee on Food Habits. The question at issue revolved about the most efficient methods to persuade individuals to change food habits (especially in light of war rationing). Lewin reported on several of these studies, concluding that group discussions were more effective than lecture methods as persuasive devices in behavioral change.(65) The implication, of course, has to do with authoritarianism (lectures) versus participative democracy (group discussion). Commensurate analysis by Bavelas, et al., substantiated that the group decision method was clearly superior to lecturing in attempts to persuade housewives to serve intestinal meat.(66) And Radke and Klisurich administered similar studies comparing group discussion versus individual conferences where attempts were made to persuade mothers to use evaporated milk in one instance, and to use more cod liver oil and orange juice in another case. Again the group discussion method was more effective.(67)

Methodologies developed in the earlier food study experiments were modified and refined in later research. Miller, for instance, also working with housewives, followed a group discussion with a public decision on use of nonpreferred meats.(68) Furthermore, Miller informed his experimental group that a follow-up study on the use of meat would be conducted. Those who made the public commitment and knew of the follow-up made significantly greater use of the meat than did the control group which simply engaged in group discussion. Miller's methodology was criticized because it allegedly agglomerated too many contributing factors. In an effort to untangle the interrelated variables, Edith Becker Bennett designed an experiment to separate the effects of (1.) group discussion, (2.) public commitment, and (3.) high consensus within the group.(69) The experiment involved attempts to persuade freshman psychology students to participate in psychological studies. Bennett's findings seemed to cast doubt on the superiority of group discussion over lecture methods. Bennett reports that:

> Group discussion as an influence technique was *not* found to be a more effective inducement to action than a lecture or no influence attempt at all . . . A decision indicated by a public commitment was *not* found to be more effective in assuring the execution of the decision than one indicated less publicly or anonymously.(70)

On the other hand, Bennett found that a high degree of actual or percieved group consensus did significantly affect individual action. Even though Bennett's lecture method procedure (a common lecture developed from preliminary group discussion protocols) has been criticized, her study casts doubt on the earlier studies which contended that discussion was clearly superior to lecturing.

Misumi replicated Bennett's work, concluding that public commitment was relatively unimportant in influencing individual behavior change.(71) Misumi discovered that discussion without decision was no more effective than lecture without decision, but that lectures followed by an individual decision were less effective than discussions followed by an individual decision. Thus, Misumi's work further clouds the issue of whether group discussion is superior to lecturing in persuasion experiments.

Although Torrance and Mason found that a lecture (versus group discussion) was more effective in persuasion in a military unit,(72) Simmons found no differences between lecture-decision and discussion-decision groups.(73) Back attempted to disaggregate the influence of independent variables, concluding that the effectiveness of lectures versus discussions will depend on (1.) prior attitudes, (2.) experience, and (3.) the time lapse between manipulation of the subjects and the measure of the criterion action.(74) Willerman investigated the effects of voting on–versus autocratic imposition of--a consumption goal (whole-wheat bread). Although the group goals were of equal difficulty, those who democratically decided on the goal were more eager to reach their goal than those who were just given a goal.(75)

The forementioned food habit studies each compared democratic group decisions to autocratically imposed decisions. A set of studies employing comparable group versus authoritarian methods were conducted to measure the effectiveness of different modes of classroom instruction. Asch studied two matched groups of students subjected to two different teaching styles. The group-centered class reported significantly greater satisfaction with teaching techniques than did the instructor-dominated class.(76) But performances by the classes were essentially equal. However, several other investigators have reported not only lower performance but also less satisfaction in experimental group-centered class sections.(77) On the general topic of group-centered teaching strategies, Riecken and Homans summarize:

> The results obtained . . . are perplexing and leave us doubtful of the effectiveness of group-centered or non-directive teaching methods.(78)

However, contravening evidence was reported in an on-the-job experiment conducted by Levine and Butler.(79) These investigators used three experimental treatments in an attempt to convince supervisors *not* to rate

workers highly simply because they held hierarchically higher positions. One group participated in a ninety-minute lecture after which questions were answered. A second group held a discussion on the relative merits of rating a *job* rather than the *man* who holds the job; and a control group was given no instructions. Those who engaged in group discussions made the "desirable" changes significantly more often than did the lecture group. The control group made no change in rating techniques.

In sum, we have cited two series of studies relating to the effectiveness of directive versus group-centered methods of persuasion and instruction. The importance of these two series of studies for the participative decision-making debate is limited on two counts: First, exact parallels are hard to draw between organizational questions and various methods of group persuasion and instruction. Second, the evidence drawn from these studies is of such heterogeneity that it inhibits prediction.

Task-oriented small-group studies. Unlike the persuasion-type studies of group-discussion versus lecture methods, most small-group studies pertaining to participation present an experimentally controlled task for the group to perform. In these task-oriented experiments, the climates of leadership are varied and the effects of the various treatments are measured.

The Iowa studies. The boys' club experiments of Lewin, Lippitt, and White are the prototypic small-group participation experiments.(80) The tasks in which the groups of 10-year-old boys engaged were mask making, mural painting, soap carving, and model plane construction. Actually, in the first report of Lewin, Lippitt, and White one learns of two experiments:

> In a first experiment, Lippitt compared one group of five 10-year-old children, under autocratic leadership, with a comparable group under democratic leadership. In a second experiment, Lippitt and White studied four comparable clubs of 10-year-old boys, each of which passed successively through three club periods in such a way that there were altogether five democratic periods, five autocratic periods, and two 'laissez faire' periods.(81)

Each of four leaders in the second experiment performed the role of autocrat and the role of democratic leader at least once. The original report emphasized boys' patterns of aggression. The records showed that:

> . . . hostility was 30 times as frequent in the autocratic than in the democratic group. Aggression . . . was 8 times as frequent . . . in the second experiment, one of the five autocracies showed the same aggressive reaction as was found in the first experiment. In the other four autocracies, the boys showed an extremely non-aggressive 'apathetic' pattern of behavior.(82)

In these experiments Lewin and his associates also report that changes from an autocratic to a democratic leader (or on occasions when the autocrat left the room) produced outbursts of pentup aggression. These factors, plus

the facts that "19 out of 20 boys liked their democratic leader better than their autocratic leader," and "7 out of 10 also liked their 'laissez faire' leader better," led the researchers to conclude that an aggressive atmosphere was caused by "the representative influence of the autocrat."(83)

The Lewin, Lippitt, and White studies clearly show that a better social psychological atmosphere was created where the democratic leadership methods were employed. Although the evidence on productivity is of a mixed nature, the writer is particularly impressed with affective implications of the Iowa studies. Inasmuch as the model of the present study relates the democratic-autocratic organization profile to an affective criterion (i.e., attitudes), the researcher has been influenced by the democratic group social-psychological results of the Iowa studies. In this regard one notes that Lewin and associates concluded that autocratic atmospheres yielded negative social-emotional reactions, while democratic atmospheres led to positive affective reactions. Where democratic procedures were effectuated:

> . . . work motivation was strong . . .originality was greater . . . there was more group-mindedness, and also more friendliness . . . (and) mutual praise was more frequent . . .(84)

Whereas in the autocratic groups there was more:

> . . . dominating ascendance . . . hostility . . . demands for attention . . . destruction of own property . . . more scapegoat behavior . . . more discontent expressed . . . more 'submissive' or 'dependent' behavior . . . conversation was less varied . . . (and) some loss of individuality (occurred). (85)

Some writers have been critical of the Iowa studies because meager productivity data were furnished. Lowin, for one, remains unimpressed with the Lewin and associates' results:

> Considering the extremity of the manipulations, the reported differences in dependent variables are not too impressive (e.g., per cent of time involved in high activity involvement in asking information, work-minded conversation, 'group-minded' suggestions, quality of work achieved). There was little pervasive tendency for democratic subjects to outperform the autocrats. In the area of 'group-relevant' actions the democratic groups did prove far more harmonious than the autocratic ones.(86)

Even Lowin, however, noted that the democratic groups were more "harmonious." Clearly the democratic atmosphere was conducive to positive group member attitudes. In this sense, the researcher would be remiss were he not to consider the results of the Iowa studies in his model building.

Digressing for a moment, it should be pointed out that White and Lippitt later (1960)(87) furnished productivity results from their studies (and this 1960 report was seemingly overlooked by the critic Lowin). The 1960 re-

port was precipitated by a conviction that the Iowa studies required more elaboration. Accordingly, White and Lippitt revealed that:

1. Laissez faire groups produced less than did democratic groups.
2. Quantity of work done in autocratic groups was somewhat greater than in democratic groups, although work motivation and originality were stronger in democratic groups.
3. More boys dropped out of the clubs during autocratic periods, and greater general discontent was found in autocratic groups.
4. More dependence and submissiveness and less individuality were found in the autocratic groups.
5. More friendliness and group-mindedness were found in democratic groups. (88)

Whatever the face value of the Iowa Studies results, one can say with assurance that these studies stimulated an interest in small-group task-related research which continues to this day.

Assembly line tasks. Some small-group researchers have simulated assembly line tasks to test the effects of authoritarian versus participative leadership. Day and Hamblin designed an assembly line task, and then tested the effects on productivity of "close" versus "general" supervisory styles. Subjects exposed to close supervision produced less than subjects exposed to general supervision.(89) Close supervision caused significant increases in aggressive feelings toward the supervisors (although an insignificant increase in *verbal* aggression). These findings, especially those on aggressive behavior, would be supportive of the Lewin, Lippitt, and White conclusions. On the productivity question, McCurdy and Eber reported no differences between authoritarian and democratic group productivity in an experiment which engaged three-man groups in the task of determining the proper setting of three switches.(90) Sales replicated an industrial assembly line, employed democratic and autocratic supervisory styles, and found no productivity differences between the groups.(91) Sales' results furnish support for McCurdy and Eber, and contradict the findings of Day and Hamblin. Spector and Suttell, moreover, employing the terms "single leadership" and "leadership sharing" to denote the democratic-autocratic dimensions, found no differences in production.(92) The assigned task was a cooperative venture in receiving, processing, and recording information. The writer notes that each of the forementioned researchers stressed production data, and as such the results are mixed as to whether democratic or autocratic leadership styles are the more productive. However, the attitudinal and social-emotional atmospheres, in each study, were reportedly more positive under democratic-oriented leaders.

Communication net studies. A considerable amount of small-group experimentation has revolved about the effectiveness of different communi-

cation arrangements (networks). In these studies, tasks are designed which require cooperation and information-sharing among the subjects. The communication nets are varied (e.g., circle, chain, wheel, Y arrangements) and both productivity and attitudinal data are collected. Most of these studies reveal that the "wheel" network is the most productive communication arrangement. There is also overwhelming evidence bearing on social-emotional relationships and subject satisfactions. The more democratic arrangements (circle and all-channels open) seem to create the greatest overall subject satisfaction. On the other hand, where all messages must be filtered through a central individual—a more autocratic arrangement—this central person is significantly more satisfied with his participation in the experiment. The writer will not belabor the communication net studies, and the interested reader is referred to an extensive literature on the subject.(93)

Task and personality variables. Small-group research results indicate that a leader must be prepared to consider a wide range of independent variables before settling on the best leadership strategy for a given situation. Petrullo and Bass generalize their small-group studies to the effect that leaders must be able to "play it by ear," behaving in many reality-oriented leadership styles.(94) Haythorn asserts that the personality traits of both leaders and followers will influence the effectiveness of participative decision making.(95) And Calvin, et al., find that permissive versus authoritarian processes closely interrelate with intelligence.(96) Furthermore, Bales' "task leader-social-emotional leader" dichotomy implies a diversity of leadership roles depending on the stage of the group process.(97) Another factor which bears both on leadership style and group effectiveness, but which is not yet fully researched, is the question of leader competence. Evan and Zelditch found that "supervisors" (formally designated for small-group experiments) lost influence when low task competence was signaled.(98) Hamblin, Miller, and Wiggins have also studied the impact of leader competence, concluding that such competence is a key factor in group morale.(99) Certainly this does not exhaust the list of independent variables, some known and some perhaps yet undiscovered, which must be controlled if more meaningful small-group study results are to be derived.

A comment on generalization. One is warned, as a matter of methodology, not to become too enamored of small-group results. Weick exhorts that extrapolation from nonorganizational research to organizational participative decision making might have little merit.(100) On the other hand, Weick is hopeful that adroit research designs can preserve the essential complexity of organizations while economizing with a smaller number of controllable variables. Perhaps the lack of generalizable evidence from experiments on participative decision making is a result of inelegant design of these experiments.

One critical factor which deserves more consideration in small-group research design has been pointed out by Sales:

> Democratic supervision in these experiments can hardly be seen as allowing the subjects to see production on the task involved as a path to self-actualization. The thought is virtually absurd. . . . To the extent that experimental studies fail to make productivity under democratic supervision a path to significantly greater need-satisfaction. . . . Such investigations simply fail to provide the conditions necessary for a test of the hypothesis in question. (101)

In essence, Sales is saying that subjects in small-group experiments seldom become emotionally involved in the situation. One of the reasons given by Sales for this lack of involvement is the "brevity of the small-group experimental sessions."(102) Without debating the validity of Sales' criticism, let us assume that subjects are not ego-involved in a small-group task. Then, results concerning dependent affective variables must certainly reflect this methodological difficulty. But, we do have reiterated evidence—from the participative decision-making small-group studies—that autocratic experimental environments result in negative social-emotional climates. Clearly, in these cases, the experiments were designed cleverly enough to enlist emotional involvement.

Lowin, too, has some brickbats, but few kudos, for small-group work on participative decision making.(103) Lowin lists such methodological weaknesses as failure to consider subjects' general attitudes toward participation, neglect of the influence process (e.g., the experimenter as an agent of social change; feedback from the influence process), and the assumption that the experimenter already knows the right decision, creating an essentially coercive-persuasive atmosphere.

It is of little advantage to criticize perjoratively the small-group studies on participation inclining to devalue the significance of findings reported. The available evidence is inconclusive to be sure, but it is thought provoking, at least. More elegent research designs will yield even more interesting results.

Next we shall peruse studies of larger organizations for further evidence on participative decision making in the "real world." Perhaps the evidence from these studies will yield a traceable theme.

Organization Observation Studies

Largely, the "facts" gathered in observational studies of extended organizations depend upon the conceptual framework employed by the researchers. The delimitation of one's efforts, in other words, requires a method of organizing observations to insulate one from virtual inundation by random perceptual stimuli. Although each researcher must design his study to fit the questions, resources, and opportunities at hand, "schools" or "approach-

es" are identifiable. In this regard, the reviewer will concentrate upon the Ohio State Leadership Studies, the Michigan Survey Research Center, the Michigan Research Center for Group Dynamics, the job enlargement advocates, Scanlon Plan votaries, and several miscellaneous observers.

Bowers and Seashore have produced an excellent review and synthesis of the Ohio State and Michigan conceptual frameworks.(104) This critique won't be redone, except to highlight some findings of these reviewers.

Ohio State leadership studies. The Ohio State group (Bureau of Business Research) originally postulated nine categories of leadership behavior, and 150 descriptive statements were written to represent these nine categories. The statements became the *Leader Behavior Description Questionnaire.* With this instrument, based upon the forementioned nine-category classification, the Ohio State Leadership Studies were conducted. Hemphill and Coons first administered the questionnaire—largely to educational groups—which provided data to obtain three orthogonal factors:

1. *Maintenance of membership character.* Behavior of a leader which allows him to be considered a "good fellow" by his subordinates; behavior which is socially agreeable to group members.
2. *Objective attainment behavior.* Behaviors related to output of the group.
3. *Group interaction facilitation.* Structuring of communication, encouraging pleasant group atmosphere, reducing conflicts.(105)

One notes with interest how these factors resemble Bales' "task" and "social-emotional" leadership roles from small-group research.

Halpin and Winer collected data about air force crews using 130 items in the Ohio State questionnaire. Factor analysis produced four orthogonal factors:

1. *Consideration.* Behavior indicative of friendship, mutual trust, respect, and warmth.
2. *Initiating structure.* Behavior that organizes and defines relationships and roles, defines organization patterns, communication channels.
3. *Production emphasis.* Emphasis on motivation toward job to be done.
4. *Sensitivity.* Awareness of social interrelationships, internal and external group pressures.(106)

The Ohio State "dimensions of leadership" are often denoted "consideration" and "initiating structure" inasmuch as items three and four above were dropped by Halpin and Winer, and since their conceptual framework is the one most commonly utilized by researchers using the Ohio State orientation. One observes that neither the Halpin-Winer nor the Hemphill-Coons studies make assertions regarding leadership dimension-organization effectiveness relationships. Rather, the questionnaire serves as a method for other investigators to operationalize leadership variables in organization observation studies.

This writer stresses the factor-analyzed importance of social-psychological variables emanating from the Ohio State leadership dimensions. This is not to underplay the structural components of leadership. Those writers who stress "initiating structure" to the point of excluding "consideration" (and vice versa) miss the systematic whole of leadership functions. We shall (in a later section) discuss the empirical results of several Ohio State studies which seem to overemphasize productivity data. (See "Mixed Evidence from Scattered Sources" section.)

The Michigan group. Concurrent with the Ohio State studies, the Michigan Survey Research Center sponsored research bearing on supervisory styles, affective variables, and productivity. Two concepts were developed using correlational analyses, i.e., "employee orientation" and "production orientation."(107) These concepts parallel the dualistic patterns noted earlier in this paper (i.e., mechanistic versus organic; scientific management versus human relations, et al.). And the Michigan school's "orientations" are quite comparable to the Ohio State "dimensions of leadership."

Refinements of the Michigan orientation continued as new research was undertaken. Katz and Kahn reported that their finding accentuated four dimensions of leadership:

1. *Differentiation of supervisory style.* Emphasis on planning and performing specialized skilled tasks; spending a greater proportion of time in actual supervision rather than paperwork, etc.
2. *Closeness of supervision.* Making greater allowance through general supervision, for individuals to work in their own way–provide opportunities for autonomy in work.
3. *Employee orientation.* Major emphasis on a supportive personal relationship.
4. *Group relationships.* Emphasis on group cohesiveness, pride and mutual aid in the work group.(108)

Pertaining to the behavioral model developed for this study, the writer regards with attention Katz and Kahn's emphasis on human factors and participation.

Lists of the "most important" leadership functions, similar to those by Katz and Kahn, continued to appear as research was completed at both the Survey Research Center and the Research Center for Group Dynamics.(109) For instance, Kahn advances four supervisory functions: (1.) providing direct need satisfaction, (2.) structuring the path to goal attainment, (3.) enabling goal achievement, and (4). modifying employee goals.(110) Cartwright and Zander issued: (1.) group maintenance function, and (2.) goal achievement functions.(111) Note how closely these resemble Barnard's "efficiency" and "effectiveness";(112) and Bales' "social-emotional" and "task" leaders.(113) Mann preferred three "skills": (1.) human rela-

tions skill, (2.) technical skill, and (3.) administrative skill.(114) Likert, synthesizing the work in the two Michigan Research Centers, adduced five conditions for effective supervisory behavior: (1.) principle of supportive relationships, (2.) group methods of supervision, (3.) high performance goals, (4.) technical knowledge, (5.) provision for coordinating, scheduling, and planning.(115)

In an attempt to capsulate these leadership studies, Bowers and Seashore have proposed that:

> . . . four dimensions emerge from these studies, which seem to comprise the basic structure of what one may term 'leadership':
> *Support.* Behavior that enhances someone else's feeling of personal worth and importance.
> *Interaction facilitation.* Behavior that encourages members of the group to develop close, mutually satisfying relationships.
> *Goal emphasis.* Behavior that stimulates a desire for . . . excellent performance.
> *Work facilitation* . . . such activities as scheduling, coordinating, planning, and by providing resources . . .(116)

Bowers and Seashore fashioned a matrix of these dimensions to reference the terminologies of nine Michigan and Ohio State researchers.(117)

This diffusive analysis of "leadership" studies is provided as an example of what organizational observation studies have produced. Scrutiny of the four compressed dimensions á la Bowers and Seashore (above) should convince one that these studies buttress participative decision-making arguments. Indeed, Likert's advocacy of the participative group is instituted in these and similar studies. Accordingly, the writer judges it appropriate to recount the details of several Michigan group organization observations. Our emphasis turns from identification of leadership functions to questions of supervisory democracy versus authoritarianism. The writer will relate findings on both social psychological and productivity criteria.

Michigan group findings with an emphasis on affective variables. Katz and Kahn provide one of their strongest statements concerning the social psychology of organizations when they intone:

> If there is one confirmed finding in all the studies of worker morale and satisfaction, it is the correlation between the variety and challenge of the job and the gratifications which accrue to workers. There are cases of people who do not want more responsibility and of people who become demoralized by being placed in jobs which are too difficult for them. But these are the exceptions. By and large, people seek more responsibility, more skill-demanding jobs than they hold, and . . . become happier, better adjusted, and suffer fewer health complaints.(118)

In other words, people seek to participate in decisions bearing on their work

life, and to extend their abilities toward realizing their potential. Katz and Kahn back this strong assertion with a comprehensive survey of pertinent findings.(119) The writer will review several of these studies, but the full bibliographic review provided by Katz and Kahn is left to the reader's interest. Selected research results which are not mentioned by Katz and Kahn, but which reflect on their emphatic statement above, will also enter into the analysis of this section.

Morse conducted a survey by interviewing 580 employees in the home office of a large insurance company.(120) The employees were engaged in a wide variety of tasks—from simply filing to mathematical calculations. The findings of this study showed that:

> People do derive important satisfaction in the expression of their skills, in interesting and challenging work, and in a sense of accomplishment from successful performance.(121)

The leadership technique found to be most conducive to such satisfactions was "general supervision" (participative and democratic). In other words:

> . . . the employees who were higher on intrinsic job satisfaction tended to be the people who described their jobs as having variety and as giving them some chance to make decisions.(122)

Furthermore, only 24 per cent of the employees surveyed were satisfied with (want no more of) the amount of decision making connected with their jobs.(123)

Katz and Kahn cite a 1950 Survey Research Center study of 5,700 factory workers, 51 per cent of whom responded that they would like to have more say in determining their work methods:(124)

> Moreover, the majority (65 per cent) thought the work would be performed better if the men had more chance to make suggestions about such things as design, setups, and layout of the work.(125)

Vroom found a correlation of +.59 between opportunity for self-expression and job satisfaction among a group of 489 blue-collar workers in a Canadian refinery.(126) Vroom's results would appear to support those reported (above) by Morse, and by Katz and Kahn. Also, Mann and Baumgartel report that workers are absent less often when they are permitted to use those skills which they feel are more important, and where they have a greater voice in the solution of job problems.(127)

This sampling of Michigan survey research gives some indication of the trend of results on social-psychological variables. We shall return to the question of workers' "greater voice" and expanded use of skills in the second succeeding section on job enlargement. Those readers who would elaborate on the affective variable material of the present section are referred to

the lengthy reviews of these topics by Likert(128) and by Katz and Kahn. (129)

Michigan group survey findings emphasizing productivity. Katz, Maccoby, and Morse found that clerical workers in an office situation produced significantly more under "general" supervision than they did under "close" supervision.(130) However, Katz, Maccoby, Gurin, and Floor reported that they were unable to replicate the findings of the office study.(131) In a railroad unit there was no relationship between closeness of supervision and productivity, although the lower productivity groups made more suggestions on how to increase production. The sentiment of the researchers was that the section chiefs in railroad units possessed great technical knowledge, and participation could actually contravene the transfer of this needed expertise. Low producing units offered more suggestions, it was concluded, because the section chiefs had abdicated their essential knowledge-providing roles. The railroad situation obviously involved a different mix of variables (e.g., tasks, environment, personalities) than were present in the office site. Furthermore, the railroad researchers didn't gather data on how the section chiefs utilized the suggestions received from low producing units. In another study—in a tractor factory—such data were acquired, with Kahn and Katz reporting a positive relationship between productivity and the probability that the foremen would act on task-relevant suggestions initiated by subordinates.(132) These studies, exemplifying Michigan production-oriented survey research, stand for the proposition that it is difficult to generalize from organization observation studies. Often the variables scrutinized and/or the uniqueness of the studied organizations make comparisons impracticable. When shaping such comparisons, it is incumbent upon one to analyze the specific details of the studies in question.

Researchers not directly connected with the Michigan school have become involved in testing the participative-climate hypotheses maintained by Likert, et al. For example, Heslin tested Likert's System 4 concepts in an agency of the federal government, and found that high producing units were more like System 4 in their management than were low producing units.(133) Parker, on the other hand, found no relationship between the system of management and productivity in an organization.(134)

Job enlargement. Broadened use of worker skills and decision-making abilities has been the emphasis of job-enlargement proponents. Trist and Bamforth revealed that job enlargement yielded increased satisfaction and productivity when a British coal mine instituted less fractionalized work methods.(135) Rice reported similar results in an Indian textile mill.(136) Walker found that job enlargement led to lesser feelings of boredom and frustration in a calculating machine factory where three previously specialized functions were combined into one job.(137) Guest studied job en-

largement in an insurance company and in a factory; in both situations less specialization and more demanding work produced significantly greater job satisfaction than did repetitious activity.(138) Elliot provides compatible evidence from a public utility study.(139) Finally, Mann and Hoffman surveyed a group of workers whose work was enlarged by more rapid job rotation and increased numbers of duties. One hundred per cent of these workers reported increased interest in their jobs, and plant morale was significantly higher after the job enlargement program was instituted.(140) Katz and Kahn have widely reviewed job enlargement results, and they conclude:

> In spite of a culture which emphasizes speed and mechanization to a degree which makes for robotlike performance, the old values of craftsmanship, of creativity, of individual initiative, and of self-determination are very much alive in millions of American workers. Men still prefer jobs which challenge their skills and which give them some measure of decision-making and responsibility. The fact that the great majority of jobs offer a routinized work content is a constant source of frustration to the man who still has some craftsmanship and enterprise in his makeup.(141)

Mixed evidence from scattered sources. In those Ohio State studies where productivity data were taken, the results are mixed. One might claim that the Ohio State studies furnish little support for adherents to the participative philosophy. Fleishman, Harris, and Burtt found that directive foremen were more proficient than considerate ones, and had no higher grievance rate.(142) Fleishman and Harris reported that production supervisors who rated high in "proficiency" by plant management had leadership patterns high in "initiating structure" and low in "consideration."(143) In the latter study, however, these "proficient" foremen were usually in departments with high labor turnover and worker absence, more worker accidents, and low worker satisfaction. Fleishman and Peters disclosed no relationship between initiating structure and productivity,(144) while Halpin found positive correlations between airplane commanders' initiating structure scores and rate proficiency.(145) Campbell revealed nonexistent or negative relations between "Domination" (by supervisors) and "Effectiveness."(146) Although these studies issuing from Ohio State lean in the direction of support for authoritarian leadership, we are again reminded that one should carefully detail the conditions of each study before trying to generalize the results. Task, personality, and other organization-specific variables will combine in each instance to individualize the results of the investigation. Several organization studies might be cited to support this contention.

French, Kay, and Meyer observed eighty-four management personnel during performance appraisal sessions. In the course of these sessions the managers participated in setting job goals for themselves. The researchers

conducted several interviews with these managers during a twelve-week period following the appraisal sessions. Results showed that an increase in participation tended to have favorable effects on attitudes and productivity to the degree that (1.) participants were high on the need for independence, and (2.) they were low on authoritarianism.(147) In another study, Vroom administered an attitude questionnaire to 108 first-, second- and third-line supervisors employed by a parcel delivery company. High perceived participation correlated ($r = +.36$, $p < .05$) with job satisfaction; but this correlation was significantly higher among supervisors with a high need for independence than for supervisors with a low need for independence ($r = +.55$ for the high independence need group, versus $r = +.13$ for the low independence need group; significantly different at the 2 per cent level). This, and a later study, suggested to Vroom that authoritarian individuals react differently to opportunities for participation than do high autonomy need individuals.(148) Support for both the French and the Vroom studies on a group level comes via Parker's research in which he claims that, for best effectiveness, leadership must be varied with the needs of unique groups.(149) Also, Ross and Hendry conclude that various leadership styles are effective under different conditions.(150)

Factors besides personality variables have proved to affect research results. Meltzer, for instance, showed in a scientific laboratory that the availability of adequate funds is an important mediating variable on the positive relationship between participation and performance.(151) Turner and Lawrence found that the effect of responsibility on satisfaction depends on the subcultural environment within which the local organization was located.(152) And Tannenbaum found that a "mutual-influence" setting led to better performance than a "one-way" setting in two industrial plants. (153)

Melman reported on a situation where a worker decision-making structure had been developed to support the management decision-making structure. During a supplier strike in which material shortages threatened to close the plant, the workers' representatives visited other plants to gather information in attempts to assure that their plant could remain open with an adequate supply of materials. The external threat variable, in this case, yielded a participation response which might not have occurred in a less threatening situation.(154)

The organization milieu yields cumbrous complications when one attempts cross-cultural interpretations. For instance, Argyle, Gardner, and Cioffi replicated the Michigan "closeness of supervision" research in Great Britain, and concluded that foremen of high producing work groups tended to use general rather than close supervision.(155) Although this conclusion is reassuring for advocates of participative decision making, it is precarious

business to make cross-cultural declarations without carefully specifying the limiting factors on those conclusions. Whyte noted that South American workers don't seem to share the American workers' desire for self-determination.(156) Weiss (1956) comments on the Germans' desire for directive leadership:

> The difference is that Americans are able to see themselves as forming a group, aside from their working relationships. The Germans are a group only as they are led by foremen.(157)

Perhaps Weiss' comment would be less true of Germany today, but at least the cultural component should be considered in studies of participative decision making.

The advocates of participation have produced numerous case study reports to allegedly support their position. For instance, we can find (1.) descriptions of particular companies in which an enlightened participative management is revealed and described;(158) (2.) attempts by theorists to show the validity of their participative systems by magnifying comparisons with successful organizations;(159) (3.) reports on the effects of job enlargement;(160) and (4.) descriptions of union democracy.(161)

A comment on observational studies. Observations in actual organizations have yielded more convincing evidence for the effectiveness of participative decision making than have small-group studies. Lowin avers, however, that observational studies lack the "critical power necessary to evaluate a model of deliberate social change."(162) In our analysis, we have abstracted selected parts of the literature to elucidate some of the variables which enter the equation in observational studies. Lowin's statement acquires significant meaning when one contemplates the complicated range of variables which can affect the results of observational studies. Lowin offers several additional points of advisement regarding the results of observational studies, including statements that:

1. we cannot evaluate the self-selection effects in observational studies . . .
2. the direction of causality is ambiguous . . .
3. ratings by self, superior, subordinate, or observer . . . are vulnerable to observer halo or rationalization . . .
4. static . . . observational reports at best reflect a "refrozen" state . . .(163)

The writer turns his attention to experimental studies in organizations in an effort to examine the experimental methodology and the strength of available findings.

Organization Experiments

Taylor and Mayo. Various students of organizations theory have found cooperative situations in which variables could be deliberately manipulated

and hypotheses were tested. These trials have sometimes been criticized for failure to control important variables and for inducing the "Hawthorne effect." Despite the criticisms, and even though the quality of the reported experiments varies widely, researchers often cite the findings of these studies with considerable confidence. A literature review on participative decision making imposes an analysis of such organization experiments.

This is not an endeavor to write the history of organization experiments, but mention *is* made of the loosely designed experiments of Frederick W. Taylor. Taylor reported studies—in support of the principles of "scientific management"—at Bethlehem Steel, Midvale Steel Machine Shop, and in a bicycle factory.(164) Although Taylor's "principles" furnished a rationale for autocratic leadership in industry, Taylor himself expressed serious interest in the individual and his welfare. Nonetheless, Taylor's interest was grossly paternalistic and could hardly be labeled "participative." Taylor techniques scored significant productivity gains. However, the level of worker and simplicity of tasks are usually neglected by those who grossly generalize and proselyte for scientific management.

In the 1920s Elton Mayo reported an amusing study wherein forty male textile workers decided on the scheduling of four ten-minute naps on sacking beside their spinning machines. (They were instructed on how to nap.) Production rose. Turnover was reduced from 250 per cent a year to 6 per cent, and the workers' morale soared. The surprise was that these improvements occurred for both participative *and* nonparticipative groups.(165)

The Harwood series. Perhaps no other company has engaged in more experimental studies than the Harwood Manufacturing Co. Dr. Alfred J. Marrow, a social psychologist and president of the company since its founding in 1939, has coupled his research interests with university researchers, especially those from the Michigan group.

Although Bavelas did an earlier study,(166) the initial and famous report on the Harwood experiments came via Coch and French.(167) The Harwood factory is located in essentially rural Marion, Va., and in the early 1940s employed about 600 workers, mostly women. The average age of the workers was 23, and, typically, Harwood was their first job. The average formal education for this group was at the eighth-grade level. The problems which activated the Coch and French experiment were (1.) a radical falling off of production, and (2.) skyrocketing absence and turnover rates when workers' job procedures were periodically changed. The company produced pajamas, men's shorts, and children's middy blouses. The experiment entailed three methods of changing job processes and, accordingly, three study groups were formed: (1.) a "no-participation" control group of eighteen hand pressers, (2.) a "participation through representative" group of thirteen pajama folders, and (3.) a "total participation" group of fifteen

pajama examiners. In each case the planning of job-process changes was handled in the manner indicated. (Coch and French describe the particular process changes, and this description is not repeated here.) The findings showed that "total participation" groups relearned their jobs the most quickly; "participation through representation" groups learned more slowly; and "no-participation" groups generally failed to achieve previously attained standards. Satisfaction and morale improved greatly through "total participation."

Considerable criticism has been focused on the Coch and French study. Gomberg, for one, has reacted to the "ubiquitous" reviews of the Harwood experiment ("ad nauseum") insisting that the experiments were perceived by the workers as manipulation. The workers' subsequent vote in favor of the International Ladies' Garment Workers' Union as bargaining agent convinces Gomberg that the Coch and French findings were greatly overrated.(168) Lowin also exhibits skepticism about the Harwood results when he demurs:

> . . . one cannot help but suspect serious flaws in the conventional production and employee system—thus, the unique contribution of participative decision making to the Harwood organization is unclear.(169)

Additional criticism might be warranted inasmuch as the Harwood work force was rural, woman-dominated, inexperienced, and uneducated. Generalizations of the Harwood experimental method to other segments of American industry must be seriously questioned in light of these Harwood workforce characteristics. Nonetheless, the continuing research at Harwood, and the adamant affirmation of continuing participation benefits by Alfred Marrow are supportive of the Coch and French findings. Recently, for instance, Marrow defended participative decision making at Harwood by asserting the following facts:

1. For the past decade—during which the participative approach has had its widest application—employee *turnover* at the plant has dropped 6 per cent annually. In the apparel industry generally (in which most employees, like those at Harwood, are women), an annual turnover rate of 25 per cent is rated excellent . . .
2. Workers' productivity has been rated by visiting engineers as the highest, or in the highest bracket, of any plants in the United States.
3. The wage scale is higher than that of any competition in this segment of the industry.
4. Harwood has grown faster than any of its competitors and is now the largest firm in its field.(170)

Not all of the research at Harwood has produced unclouded results abetting participation. French, et al., when reporting on the continuing

series of Harwood experiments, cited a case in which measurements were made of productivity, turnover, and grievances one year after introduction of experimental participative changes.(171) Although production had risen 10 per cent on one item, it didn't rise at all on another. Although turnover rates decreased, these had trended downward for two years before the experiment. Furthermore, the grievance rate rose rapidly during the year of the experiment. (However, grievance rates could signal a more participative atmosphere—a sense of freedom to complain.)

French, Israel, and As replicated the Coch and French study in a Norwegian factory. These researchers hedged their findings by admonishing that:

> The operational definitions used in this experiment are sufficiently different from those in the Coch and French experiment for exact comparisons not to be possible.(172)

Yet they were willing to affirm that "the present experiment . . . seems to yield consistent results if we accept the additional effects of conditioning variables."(173) One is reminded (in spite of the researchers' disclaimer) that "there was *no difference* between the experimental and control groups *in the level of production.*"(174) The "conditioning variables" of which the researchers apprise are: (1.) the workers were strong in union tradition, and most did not consider directly individualized participation legitimate—they preferred to work through union representatives, and (2.) the management would not permit participation experiments on production relevant decisions. In light of the researchers' demur, this writer would hesitate to proffer the French, Israel, and As results as supporting evidence for the Coch and French conclusions. There are, furthermore, no findings reported on affective variables.

Fleishman did a study using circumstances and with data quite similar to the Coch and French setting.(175) Like Mayo's spinners, both experimental and control groups increased in productivity. One might surmise that the Hawthorne effect entered into Fleishman's results. Morale was improved in both groups, in other words.

Morse and Reimer, Bowers and Seashore, Weldon—validation of System 4. Some theorists have attempted organization experiments to provide direct empirical support for their theoretical positions. For instance, researchers at Michigan have undertaken experiments conceptually framed to approximate the "participative group" or "System 4" hypotheses. One of the best known of these studies was conducted by Morse and Reimer in a large office situation.(176) The character of the supervisory hierarchy was changed, with some decisions being made in the usual top-down manner, while others were made in a bottom-up fashion. Two divisions received the "participative treatment" and the two other divisions were "hierarchically

controlled." The treatments continued for approximately one year and involved 500 employees. *Both* groups scored significant increases in productivity. Morse and Reimer interpreted this result by explaining that the hierarchical groups lost more people by firings, whereas the participative groups were reluctant to terminate inefficient employees.

One of the two hypotheses tested by Morse and Reimer posited that those in the "Autonomy" program would significantly increase their satisfaction with supervisors, while those in the "Hierarchically" controlled program would decrease in such satisfaction. The results upheld this hypothesis:

> The employees' attitudes toward their supervisors show significant changes in the predicted directions in the two programs. Those in the Autonomy program became more satisfied than they had previously, while those in the Hierarchically-controlled program became less satisfied . . . and increase in favorableness toward the company under the Autonomy program and a decrease under the Hierarchically-controlled program.(177)

The researchers speculate, on the basis of attitudinal data, that, given more time, the productivity of the hierarchical groups would have fallen, whereas that of the participative groups would have continued to rise. The time factor complication in this and other Michigan experiments persuaded Likert to include time as a "key variable in his revised theory of participative systems."(178)

Seashore and Bowers have administered elaborate experiments aimed at validating participative group methods. One study was done over a three-year period, and the results reported improved affective climate but little productivity data were collected.(179) More recently, a carefully controlled study by Bowers and Seashore involved forty independently managed and owned offices and branches of a company.(180) Results showed that "supportive" (participative) managers and groups tended to be the most productive units. Finally, Bowers' and Seashore's experimental proclivity produced collaboration with Marrow at the Weldon Plant of Harwood Manufacturing.(181) Here a shift to System 4 management was attempted with managers, supervisors, et al., carefully trained to facilitate the transition. Extensive engineering changes radically modified the workflow, and an "earnings development" training program was instituted. Likert reported that:

> Average earnings of piece-rate workers increased by nearly 30 per cent. At the same time total manufacturing costs decreased by about 20 per cent. Turnover dropped to half its former level. . . . Interviews by Michigan researchers reflected vastly more friendly attitudes towards the company . . . and the organization began to show a profit.(182)

Clearly, the Marrow magic was at work again! Marrow exuberates his confidence in the participative approach when he clearly states:

> The Harwood management approach continues . . . to be concerned with human behavior and social relationships as well as technology and production . . . the company's executives are convinced that their participative management system has played a major part in bringing Harwood with its seven plants and nearly 3,000 employees to the foremost in its industry.(183)

It is hard to argue with success, but one might contest the antecedents to such success.

Mixed evidence from scattered sources. We have emphasized organizational experimentation pivoting about Harwood, and also the Michigan theorists. Other students have approached organization experiments with different emphasis. For example, the French, Israel, and As treatment represented an attempt to move the participative hypothesis to another culture. Similar attempts by other scholars have produced hybrid results. Rice recounted a study in an Indian textile mill where employees participated in altering group structures, and in changing production methods and work schedules.(184) Productivity and quality rose significantly in this situation. Similarly, in another Norwegian experiment, King found that factory workers increased in output and satisfaction when given responsibility for their own work methods and organization.(185) However, Thorsrud and Emery have described various experiments in Norway, Great Britain, and Yugoslavia where limited success with participation decision making was reported.(186)

In the United States, as well, the approaches to organization experiments have been versatile. A potpourri of experiments yields a compound set of conclusions. Jacques detailed a participation experiment which spanned a number of years. The report lacks hard data, but Jacques did report resentment among middle managers who felt a sense of displacement when participation created direct relations between rank-and-file workers and top management.(187) Lawrence and Smith detailed a study where groups set their own production goals after discussing the situation, and performed better than groups which held the discussion but did not have the opportunity to set production goals.(188) Bavelas and Strauss told of a treatment in which girls were given control of their own conveyor belt, resulting in a phenomenal production increase with no decreased quality.(189) This unique program disintegrated, though, because experimental group workers began to make more money at piece rates than that earned by skilled workers. Management escaped embarassment by revoking a "learning bonus" and thereby removed the incentive for the girls. The assembly line again moved at its time-study designated speed, and within a month six of the eight workers had quit. Van Zelst produced an experiment where construction crews chose their sociometrically most-liked work partners.(190) As a result (1.) job satisfaction increased, (2.) turnover rates declined, (3.) la-

bor costs were lowered, and (4.) material costs were decreased. This list of studies should convince the reader of the multiplicity of situations into which experimental participation has been thrust.

Sometimes study designs are grand. One experiment was conducted by reorganizing an entire enterprise, Non-Linear Systems in Del Mar, California. The intent was to convert the company of about 300 employees to a McGregor Theory Y orientation. Wages were set higher than those available in the rest of the community, and job security was emphasized. Kuriloff reported that productivity increased substantially, quality went up, and absenteeism decreased.(191) In another total-company approach, Blake and Mouton have proclaimed successes through application of their "9,9" system, which includes an ample participative emphasis.(192) One particular experiment of this kind was performed in a refinery.(193) Both the Non-Linear Systems and Blake-Mouton experiments were conducted in relationship to a resolved theoretical position. As such, these studies approach experimentation from a "school of thought" approach. Likert and his associates used a similar tack.

A carefully designed conceptual scheme for participation experimentation is the Scanlon Plan. Workers participate in this system by making suggestions and sequentially meeting to discuss and evaluate the ideas which could yield higher production. Departmental committees may put these ideas into action, as may lower level supervisors. Higher level committees are instituted to evaluate plant-wide improvements. Savings are shared by all unit members where a change is made. Excellent reviews of Scanlon Plan experience are provided by Lesieur(194) and by Helfgott.(195) Strauss and Sayles have disaffirmed the value of such operations. Strauss observed that large companies have experienced little success with Scanlon Plans.(196) Recently, however, the Kaiser Steel Corporation has proclaimed some progress with a profit-sharing concept reflective of Scanlon Plan influence. Lowin promulgates the merits of the Scanlon Plan by alleging:

> Although there are inevitable exceptions, most evaluations have attested to the significant technical and economic advantages of Scanlon type participative decision making. The conceptual structure is not psychological, but the results are impressive.(197)

Of the experimental situations covered in this section of the chapter, an abundant number propound the merits of participative decision making. The writer is highly impressed by the Harwood experience, by some of the Michigan studies, by the Blake and Mouton results, by the Scanlon Plan reports, and by several of the potpourri of randomly reviewed studies. It seems to this researcher that prospects for conclusive evidence on the merits of participation rest with organization experiments.

The writer has also observed with interest that those experiments which

have yielded positive results through participation also emphasize task and structural variables. In other words, successful experiments have practiced the "revisionist" approach. A combination of structural participation and concern for "people" seemingly help to alleviate organizational alienation.

CHAPTER V

SUMMARY

The reviewer's conclusions regarding the writing and research on participative decision making have been interwoven throughout this chapter. Cursory notations have been made on the methodological problems inhering in each of the three categories of research reviewed. In each category one encounters studies which herald, and those which contravene, the social-psychological and economic value of participative decision making. The most convincing evidence, perhaps, originates with organization experiments. We have identified some arguments relating to facts, while at the same time spotting some value issues. We have identified the organizational dichotomy of the individual versus the collective. A capsulation of this review is appropriately provided by Lowin in his admonition:

> It is abundantly clear that any simplistic participative decision-making hypothesis is too gross to be proven or disproven. The findings to date can best be interpreted as mapping the mediating conditions which shape the effects of participative decision making. There are already available sufficient data to suggest specific ad hoc hypotheses about mediating actor and environmental variables. Instead of trying wastefully to 'prove or disprove' the participative decision-making hypothesis, future research would do well to focus on these intermediate conditions in order to ascertain the parameters of participative decision-making effectiveness. (198)

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6. Rensis Likert, *New Patterns in Management* (New York: McGraw-Hill, 1961).

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9. Herbert Shepard, "Organic and Mechanistic Models of Organization," paper presented at the Esso Laboratories, Thayer Hotel, Summer, 1959, cited by Chris Argyris, *Integrating the Individual and the Organization* (New York: John Wiley and Sons, 1964), p. 183.

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Organization, pp. 214-215; Warren G. Bennis, "Revisionist Theory of Leadership," pp. 725-730.

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23. Kerr and Fisher, p. 305.
24. Bennis, "Revisionist Theory of Leadership," p. 728.
25. Bennis, "Revisionist Theory of Leadership," p. 729.
26. Bennis, "Revisionist Theory of Leadership," pp. 731-732.
27. William Gomberg, "The Trouble with Democratic Management," *Trans-Action,* 111 (July-August, 1966), pp. 30-35.
28. Gomberg, "The Trouble . . . Management," p. 35.
29. Gomberg, "The Trouble . . . Management," p. 32.
30. Gomberg, "The Trouble . . . Management," p. 32.
31. Charles Perrow, "Hospitals: Technology, Structure, and Goals," in *Handbook of Organizations,* ed. by Jas. G. March (Chicago: Rand McNally, 1965), p. 913.
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37. Maslow, "The Superior Person," p. 13.
38. Chris Argyris, *Personality and Organization* (New York: Harper and Row, 1957), p. 207.
39. Ralph K. White and Ronald Lippitt, *Autocracy and Democracy* (New York: Harper and Brothers, 1960), p. viii-ix. It is interesting to note that Lewin seems to be speaking the language of the present day student "rebellion," but in 1943.
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